

identical electrical, physical, and functional (or hydraulic) characteristics that affect energy consumption, energy efficiency, water consumption, or water efficiency.

*Cube type ice* means ice that is fairly uniform, hard, solid, usually clear, and generally weighs less than two ounces (60 grams) per piece, as distinguished from flake, crushed, or fragmented ice.

*Energy use* means the total energy consumed, stated in kilowatt hours per one-hundred pounds (kWh/100 lb) of ice and stated in multiples of 0.1. For remote condensing automatic commercial ice makers, total energy consumed shall include condenser fan power.

*Harvest rate* means the amount of ice (at 32 degrees F) in pounds produced per 24 hours.

*Ice-making head* means automatic commercial ice makers that do not contain integral storage bins, but are generally designed to accommodate a variety of bin capacities. Storage bins entail additional energy use not included in the reported energy consumption figures for these units.

*Maximum condenser water use* means the maximum amount of water used by the condensing unit (if water-cooled), stated in gallons per 100 pounds (gal/100 lb) of ice, in multiples of 1.

*Remote compressor* means a type of automatic commercial ice maker in which the ice-making mechanism and compressor are in separate sections.

*Remote condensing* means a type of automatic commercial ice maker in which the ice-making mechanism and condenser or condensing unit are in separate sections.

*Self-contained* means a type of automatic commercial ice maker in which the ice-making mechanism and storage compartment are in an integral cabinet.

[70 FR 60415, Oct. 18, 2005, as amended at 71 FR 71371, Dec. 8, 2006; 76 FR 12503, Mar. 7, 2011]

#### TEST PROCEDURES

#### § 431.133 Materials incorporated by reference.

(a) *General.* The Department incorporates by reference the following test procedures into subpart H of part 431. The Director of the Federal Register

has approved the material listed in paragraph (b) of this section for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Any subsequent amendment to this material by the standard-setting organization will not affect the DOE test procedures unless DOE amends its test procedures. The Department incorporates the material as it exists on the date of the approval by the Federal Register and a notice of any change in the material will be published in the FEDERAL REGISTER.

(b) *Test procedures incorporated by reference.* (1) Air-Conditioning and Refrigeration Institute (ARI) Standard 810–2003, “Performance Rating of Automatic Commercial Ice-Makers.”

(2) American National Standards Institute (ANSI)/American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 29–1988 (RA 2005), “Methods of Testing Automatic Ice Makers.”

(c) *Availability of references*—(1) *Inspection of test procedures.* The test procedures incorporated by reference are available for inspection at:

(i) National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741–6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

(ii) U.S. Department of Energy, Forrestal Building, Room 1J–018 (Resource Room of the Building Technologies Program), 1000 Independence Avenue, SW., Washington, DC 20585–0121, (202) 586–9127, between 9 a.m. and 4 p.m., Monday through Friday, except Federal holidays.

(2) *Obtaining copies of test procedures.*

(i) Anyone can obtain a copy of ARI Standard 810–2003 from the Air-Conditioning and Refrigeration Institute, 4100 N. Fairfax Dr., Suite 200, Arlington, VA 22203 or <http://www.ari.org/std/standards.htm>.

(ii) Anyone can purchase a copy of ASHRAE Standard 29–1988 (RA 2005), “Methods of Testing Automatic Ice Makers,” from the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., 1791 Tullie

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Circle, NE, Atlanta, GA 30329, (404) 636-8400, or <http://www.ashrae.org>.

[71 FR 71372, Dec. 8, 2006]

### § 431.134 Uniform test methods for the measurement of energy consumption and water consumption of automatic commercial ice makers.

(a) *Scope.* This section provides the test procedures for measuring, pursuant to EPCA, the energy use in kilowatt hours per 100 pounds of ice (kWh/100 lbs ice) and the condenser water use in gallons per 100 pounds of ice (gal/100 lbs ice).

(b) *Testing and Calculations.* Determine the energy consumed and the condenser water use rate of each covered product by conducting the test proce-

dures, set forth in the Air-Conditioning and Refrigeration Institute's Standard 810-2003, "Performance Rating of Automatic Commercial Ice-Makers," section 4, "Test Requirements," and section 5, "Rating Requirements." (Incorporated by reference, see § 431.133) Do not use the formula in section 8.3 of ANSI/ASHRAE Standard 29-1988 (RA 2005) for calculating the power consumption, but instead calculate the energy use rate (kWh/100 lbs Ice) by dividing the energy consumed during testing by the total mass of the ice produced during the time period over which energy consumption is measured, normalized to 100 pounds of ice as follows:

$$\text{Energy Consumption Rate (per 100 lbs ice)} = \frac{\text{Energy Consumed During Testing (kWh)}}{\text{Mass of Ice Collected During Testing (lbs)}} \times 100\%$$

[71 FR 71372, Dec. 8, 2006]

## ENERGY CONSERVATION STANDARDS

### § 431.136 Energy conservation standards and their effective dates.

Each automatic commercial ice maker that produces cube type ice with capacities between 50 and 2500 pounds

per 24-hour period when tested according to the test standard established in accordance with section 343 of EPCA (42 U.S.C. 6314) and is manufactured on or after January 1, 2010, shall meet the following standard levels:

Equipment type	Type of cooling	Harvest rate (lbs ice/24 hours)	Maximum energy use (kWh/100 lbs ice)	Maximum condenser water use* (gal/100 lbs ice)
Ice Making Head .....	Water ...	<500 .....	7.80–0.0055H .....	200–0.022H.
Ice Making Head .....	Water ...	≥500 and <1436 ..	5.58–0.0011H .....	200–0.022H.
Ice Making Head .....	Water ...	≥1436 .....	4.0 .....	200–0.022H.
Ice Making Head .....	Air .....	<450 .....	10.26–0.0086H .....	Not applicable.
Ice Making Head .....	Air .....	≥450 .....	6.89–0.0011H .....	Not applicable.
Remote Condensing (but not remote compressor) ...	Air .....	<1000 .....	8.85–0.0038H .....	Not applicable.
Remote Condensing (but not remote compressor) ...	Air .....	≥1000 .....	5.1 .....	Not applicable.
Remote Condensing and Remote Compressor .....	Air .....	<934 .....	8.85–0.0038H .....	Not applicable.
Remote Condensing and Remote Compressor .....	Air .....	≥934 .....	5.3 .....	Not applicable.
Self Contained .....	Water ...	<200 .....	11.40–0.019H .....	191–0.0315H.
Self Contained .....	Water ...	≥200 .....	7.6 .....	191–0.0315H.
Self Contained .....	Air .....	<175 .....	18.0–0.0469H .....	Not applicable.
Self Contained .....	Air .....	≥175 .....	9.8 .....	Not applicable.

H Harvest rate in pounds per 24 hours.

\*Water use is for the condenser only and does not include potable water used to make ice.

[70 FR 60415, Oct. 18, 2005; 70 FR 61698, Oct. 25, 2005]

## Subpart I—Commercial Clothers Washers

SOURCE: 70 FR 60416, Oct. 18, 2005, unless otherwise noted.